

Building Jobs in Iowa

New Deal Dams of
the Wapsipinicon River
Watershed in
Northeast Iowa





Cover images

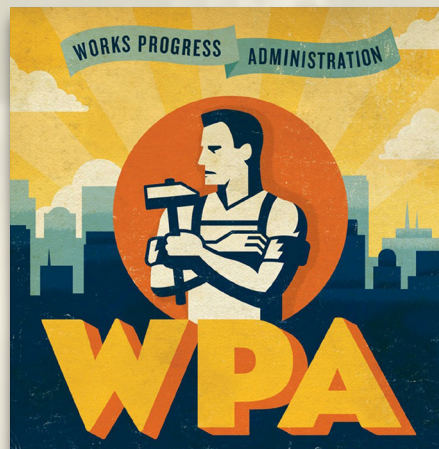
Front—background image of Littleton Dam (OSA).
 Front Inside—historic images of Littleton Dam (from LCHS-FFPC).
 Title Page—Upper: WPA poster. Lower: 1936 image of Gene Hallman, Leonard Stella, Ray Baldwin, and Q. S. Walker at Littleton Dam (from LCHS-FFPC)
 Back—recent images of dams. Upper: Littleton Dam (OSA). Middle: Frederika Dam (from USFWS). Lower: Quasqueton Dam (from USFWS).

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New Deal Dams of the Wapsipinicon River Watershed in Northeast Iowa

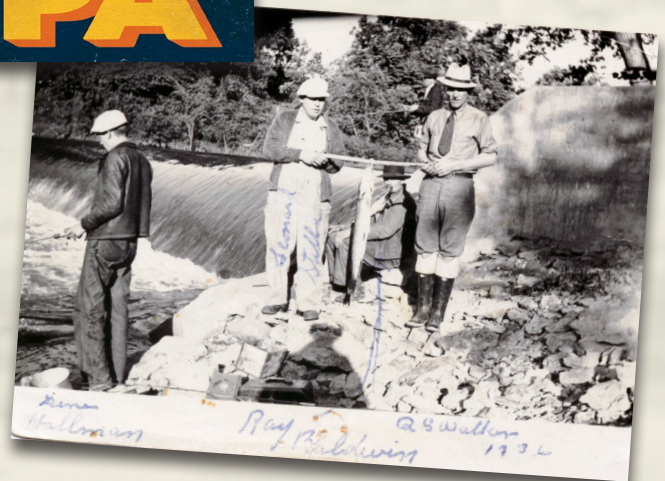
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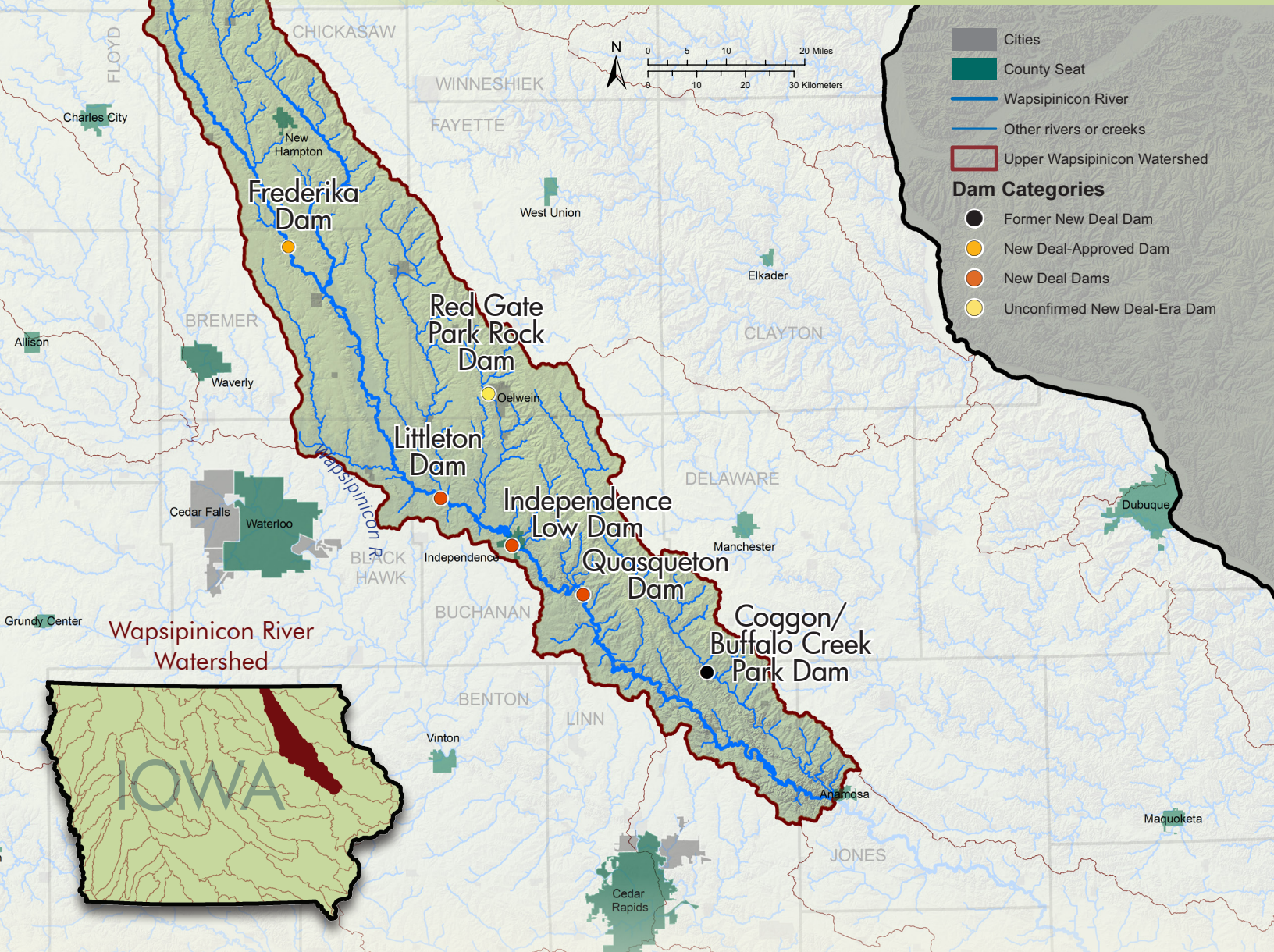


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New Deal Dams in the Wapsipinicon River Watershed



Introduction

The Wapsipinicon River, affectionately known as the “Wapsi,” flows nearly 300 miles through northeastern Iowa to the Mississippi. Strung throughout its drainage basin is a series of dams that are highly valued by their communities as places of recreation and scenic beauty. The Wapsipinicon has long had a reputation as a fishing stream, known for catfish, northern pike, carp, sunfish, walleye, and smallmouth bass. It is not uncommon to find anglers of all ages gathered at one of the Wapsipinicon’s dams to enjoy a day of fishing and possibly take home a prize catch. As time passes, however, a dam may outlive its original function, impede fish passage, and pose a safety hazard. But the idea of demolishing an outdated dam often rallies the community in an attempt to preserve the landmark.

Dams are valued today for their role in local recreation, but the stories behind their original construction have often been forgotten. One important period of dam building in Iowa came during the Great Depression (1929–1942). Dozens of dams throughout Iowa were built during the depression as work relief projects under the administration of President Franklin D. Roosevelt. These dams were funded by one or more federal programs known collectively as the New Deal. Jobs provided by these construction projects put men to work and helped many families survive the worst economic crisis in the 20th century.

This booklet will explore the history of New Deal work relief projects in Iowa, focusing specifically on New Deal-approved dams in the Wapsipinicon River watershed in northeast Iowa. Three of these dams are located in Buchanan County, one in Linn County, and one in Bremer County.

The Great Depression in the Farm Belt

The stock market crash of October 1929 is generally seen as the spark that plunged the nation into the Great Depression. The statistics are grim. In December 1929 three million Americans were out of work. By mid-winter the figure had risen to between 4 and 5 million without jobs.¹ But the national crisis was only a deepening of what Midwestern farmers had already experienced during the 1920s. While urban America was celebrating the “roaring twenties,” falling produce and land prices were destroying the rural economy.

The early decades of the 20th century were known as the “golden age of agriculture.” Bolstered by the demands of World War I and encouraged by the support of government

price guarantees, Midwestern farmers increased their production phenomenally. They fed a starving Europe and supplied the armies fighting “over there.” Farmers put more acres into production and increased herd sizes, investing borrowed money in land and equipment. As the needs of the war years faded, however, demand lessened and government supports were ended in 1920. Many European countries, trying to get back on their feet after the devastation of the war, imposed high tariffs on American goods, effectively cutting off these markets. With foreign markets suddenly closed, prices for land and commodities in the United States collapsed abruptly in 1921.²

Farm prices fell by 92 percent between 1920 and 1932. In order to make up for the dropping prices, farmers continued to produce at record rates. They were heavily invested in their expansion and much of this investment was borrowed money. Overproduction backfired, however. The surplus of products glutted the market and prices fell even farther. Banks began to call in outstanding loans and those who could not pay faced the loss of their farms. Foreclosures and tax sales became common in the 1920s. Foreclosures continued to increase as the rest of the nation plunged into economic depression.³

As the foreclosure crisis grew, so did fear and anger within farming communities. Some increasingly desperate farmers resorted to collective actions to protest their situation. One such action was a “penny auction.” At a penny auction, neighbors sympathetic to an owner whose farm had been foreclosed would attend the foreclosure auction in large numbers, enter extremely low bids, and intimidate anyone who attempted to bid higher. In the end the bank would get whatever was bid and the neighbors would return the farm and its contents to its original owner.



Auction of a farm foreclosure, ca. 1933 (Wikimedia Commons, U.S. National Archives and Records Administration).

The Great Depression by the Numbers

The effects of the unstable economy during the 1930s were wide-spread and devastating. The statistics tell the story not only of the vast numbers of individuals and families affected but of the speed with which the economy crashed. Everyone was affected. A whole generation of working and middle class families struggled just to put food on the table (Kennedy and Johnson 2005:8).

- The unemployment rate jumped from 3.2% in 1929 to 24.9% in 1933 (McElvaine 1984:75).
- Between 1930 and 1931 3,646 banks failed taking over 2.6 billion dollars in private deposits with them.
- 54,640 businesses failed.
- By 1932 nearly 12 million people were out of work.
- Value of farm property declined from \$78.3 billion in 1920 to \$51.8 billion in 1931 (Kennedy and Johnson 2005:8).

In Iowa the depression had started **10 years** before the stock market crash.

- In 1920 167 banks closed. That number rose to 505 in 1921 and remained high for several more years (Morain 2005–2014a).
- Farms were foreclosed on at record rates.
- In Iowa the number of farm foreclosures in 1927 had reached 2,300 and farmland was valued at \$132/acre, barely half of its 1920 peak of \$227/acre.
- In 1932 the number of farm foreclosures peaked at 6,400 while land values had dropped to \$89/acre. Land values were at their lowest in 1933, at just \$65/acre (Bauer 1989:24).
- By 1939 nearly 30% of farmland in Decatur and Wayne counties was held by banks and other lending agencies (Yoder 1991:53).

Desperate Iowa Farmers Kidnap a Judge

As farm foreclosures increased, farmers in Iowa became increasingly desperate. Violence occurred or was threatened at a number of foreclosure sales across the state. In Le Mars, Iowa, a mob of angry farmers burst into a court room and dragged the judge from the bench. They carried him out of the court room and drove him out into the countryside. He was beaten, threatened and cajoled, as they tried to make him promise that he would not take any more cases that would cost a family their farm. When he refused, they threatened to hang him. Fortunately, calmer heads prevailed. Rather than hanging, the judge was dumped and left alone in the countryside to ponder his position. The governor of Iowa called out the National Guard who rounded up some of the leaders of the mob and put them in jail (Morain 2005–2014b).

Some farmers decided to band together, hoping that, like the labor unions, they could force higher prices for their products if they stood together and withheld their products from the market. One of the first such united actions was the Sioux City “Milk Strike” organized by the Sioux City Milk Producers Association. Dairy farmers set up picket lines on major roads into town blocking delivery of milk and other products and sometimes dumping and destroying deliveries.⁴

On May 3, 1932, a group of farmers met at the fairgrounds in Des Moines to form the “Farmers Holiday Association.” The name referred to the so-called “Bank Holiday” that Roosevelt declared shortly after taking office to forestall a run on the banks. The farmers noted that if bankers could take a holiday to reorder their business, they should be allowed to do the same.⁵

Similar protest movements spread to other Midwestern and Great Plains states and continued through most of 1933. Some turned violent. Although these uncoordinated attempts were largely unsuccessful, they starkly dramatized the economic crisis in the farm belt in the early 1930s.⁶

“If we cannot obtain justice by legislation, the time will have arrived when no other course remains than organized refusal to deliver the products of the farm at less than production costs.”

[1927 resolution of the Corn Belt Association, revived in 1932 as justification for the direct action tactics of the Farmers Holiday Association (Bender 1932)]

The New Deal

In November 1932, Franklin D. Roosevelt was elected president with a mandate to end the economic crisis. When he took office, Roosevelt promised to take “direct and vigorous” action to relieve the American people of the suffering brought on by the Great Depression. He vowed to attack the problems as if the nation was going to war. His “new deal for the American people” included two types of programs. Some were designed to stabilize and strengthen the most critical sectors of the economy: banking, industry, and agriculture. Others were designed to provide relief for the unemployed. The New Deal would forever change the physical and cultural landscape of America and permanently alter the federal government’s relationship to the American people.



President Franklin D. Roosevelt (Wikimedia Commons).

Relief Programs

Roosevelt wasted no time taking action aimed at turning the tide of the desperate unemployment situation. He quickly implemented a series of relief programs. Some programs provided direct relief and did not have a work requirement. Direct relief, also known as “the dole,” was unpopular.

Unemployed workers preferred the dignity of working for their wages. The federal government shared this sentiment, and turned the focus of its efforts to work relief. Work relief programs were designed to help build the nation’s infrastructure and restore prosperity by putting people back to work.

Timeline of New Deal Programs

CCC—Civilian Conservation Corps (1933–1942)

conservation of soil, timber, and water, and public accessibility

FERA—Federal Emergency Relief Administration (1933–1935)

direct and
work relief

PWA—Public Works Administration (1933–1943)

hired unemployed indirectly by contracting with private construction firms

CWA—Civil Works Administration (1933–1934)

winter
projects

WPA—Works Progress [Work Projects] Administration (1935–1943)

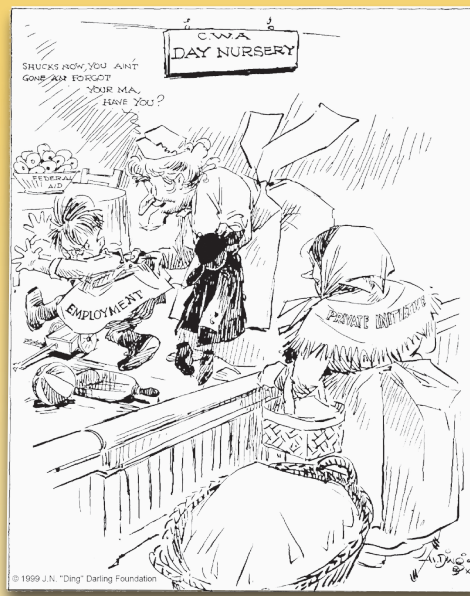
funded labor for work projects; both blue and white collar work

1933

→ 1943



"We'll all enjoy our Thanksgiving more for it." Editorial cartoon by Jay N. ("Ding") Darling, dated November 30, 1933. Reproduced courtesy of the "Ding" Darling Wildlife Society.



"Oh we do hope not." An early depiction of what would later be disparaged as the "nanny state." Just three months after the publication of "We'll all enjoy our Thanksgiving more for it," where the CWA worker was depicted as a proud male head of household who was finally able to work again to support his family, the worker ("Employment") was reduced to a toddler running from his mother ("Private Initiative") to remain at the "C. W. A. Day Nursery." Editorial cartoon by Jay N. ("Ding") Darling, dated February 23, 1934. Reproduced courtesy of the "Ding" Darling Wildlife Society.



"Hey! Wake up. There's a cash customer in the store." New Deal relief programs were designed not only to improve the lives of unemployed workers and other destitute Americans, but to boost economic growth by providing people with more money to spend. As people spent more, businesses were expected to expand to meet the new demand, and unemployment would fall. Editorial cartoon by Jay N. ("Ding") Darling, dated December 7, 1933. Reproduced courtesy of the "Ding" Darling Wildlife Society.

The most important work relief programs were, in order of their creation, the Civilian Conservation Corps (CCC), Federal Emergency Relief Administration (FERA), Public Works Administration (PWA), Civil Works Administration (CWA), and Works Progress Administration (later Work Projects Administration) (WPA). These programs focused on different types of projects, funded those projects in different ways, and provided relief to different segments of the unemployed population. But all had the goal of relieving unemployment while creating lasting projects in the public interest. Three of these programs—the CWA, FERA and WPA—provided funds to build dams in the Wapsipinicon watershed. The two other programs (CCC and PWA) were used to construct dams elsewhere, but not in the Wapsipinicon watershed.

The Federal Emergency Relief Administration (FERA)

The Federal Emergency Relief Administration (FERA) was established in May 1933. It was headed by Iowa native and Grinnell College graduate Harry L. Hopkins, a close advisor

to President Roosevelt and one of the main architects of the New Deal. The creation of FERA marked the first time that the federal government, rather than state and local agencies, assumed direct responsibility for providing relief to the unemployed. FERA funds could be used for both direct relief and work relief. Direct relief was most common because it was easier to administer.⁷

FERA grants were administered by state agencies which were often inexperienced and overwhelmed. These agencies wanted to avoid funding projects that might compete with private industry. As a result, many projects were make-work projects of limited usefulness.⁸

Work projects under FERA were briefly taken over by the Civil Works Administration (CWA). The CWA was a very successful but short-lived program that lasted only from November 1933 to April 1934. The federal government then returned to its policy of supporting work relief only through FERA.

The return to FERA meant a return to all the inadequacies in that program. Many workers were forced to return to direct relief when they would have preferred to work. For those who



WPA posters (by WPA and Work Projects Administration Poster Collection [public domain], via Wikimedia Commons).

continued to work, hours and pay rates were reduced, and federal worker's compensation ended. After the success of the CWA, a return to FERA was widely viewed as unacceptable, forcing the Roosevelt administration to reconsider its relief policies. The result was the Works Progress Administration (WPA), created in 1935. FERA ceased to operate at the end of 1935. Its work relief component was taken up by the WPA, while its direct relief component was assumed by other newly created New Deal programs.⁹

The Civil Works Administration (CWA)

Relief workers predicted that the winter of 1933–1934 would be the most desperate of the depression for needy families. The ranks of the unemployed continued to grow, and many people were out of resources, with no food, no heat, and poor clothing. Severe winter weather was expected to compound the disaster. On November 8, 1933, the federal government announced the creation of the Civil Works Administration (CWA). The CWA was designed to remove heads of household from the direct federal relief rolls and put them to work on public works projects at wages higher than the amounts they were receiving on direct relief.¹⁰

The CWA was short-lived by design, intended only to provide work relief to four million Americans during the 1933–1934 winter. It officially ended on April 1, 1934.¹¹ For a program that lasted less than five months, the CWA was significant in several ways. First, it succeeded in providing paid work

to millions of unemployed Americans, boosting the economy while removing the stigma that many people attached to being on the dole. Second, it served in many ways as a precursor to the best known New Deal program, the Works Progress Administration (WPA). The successes and failures of the CWA were analyzed to help make the WPA an even more effective work relief program. Finally, the CWA's lasting impact on America's built environment remains evident today. After more than 80 years, CWA infrastructure projects can still be seen in Iowa and elsewhere.

The Works Progress Administration (WPA)

The Works Progress Administration (WPA), created in May 1935, bore many similarities to the CWA. Like the CWA, it funded labor for work projects suggested by local organizations and state and local governments; the pay was higher than FERA direct relief payments; and it included both blue collar and white collar work.¹² Intended to last for the duration of the depression, the WPA operated for nearly seven years, much longer than the CWA. It ended in early 1942, after the United States had entered World War II. Because of the WPA's longevity, the large number of people it employed, and the large number of lasting work projects it helped fund, the WPA is often thought of today as the quintessential New Deal program.

In the News . . .

14 THURSDAY, FEBRUARY 22, 1934

WATERLOO DAILY COURIER

Waverly Council Plans for Further CWA Projects

APPROPRIATION IS MADE BY COUNCIL TO BUY SUPPLIES

Redecoration of Municipal Buildings Planned to Provide Employment.

(Courier Special Service)
Waverly, Ia.—Appropriations for materials and incidental expenses connected with CWA improvements in Waverly were made at a special meeting of the city council Wednesday afternoon.

Plan Further Employment.
The city administration made plans for providing employment after the river improvement shall have been completed, arranging for redecoration of city hall and power plant and for landscaping parks and other public grounds.

An appropriation of \$300 for redecoration supplies was made and \$250 was allowed for the landscaping expense. The council allotment for the river project is \$1,500.

Agree on Supervising Officials.
Agreement was reached between the mayor and the council that supervision of all present and future CWA work shall be shared by Arthur Myers, city engineer, and L. H. Rust, street commissioner.

LOW FARM PAY SEEN AS HELPING SALE OF HORSES

Farmers Now Work 3,000 Hours for Less Than 15 Cents Per Hour.

Chicago.—(AP)—“Farmers will not trade 1,000 hours of their labor for 300 hours of mechanics' labor,” says Wayne Dinmore, secretary of the Horse Association of America, as part of his explanation of a reviving demand for farm horses and mules.

“Hundreds of thousands of farmers,” he explains, “are working 3,000 hours or more a year and their income is not sufficient to pay them more than 15 cents an hour.

Rural Earnings Low.
“Many of them will clear less than a dime an hour. Thus it will cost them 1,000 hours of work to purchase a product representing only 300 hours of work by mechanics receiving 50 cents an hour.

“As long as the differential between prices of farm products and prices of commodities which it is desired to sell to farmers remains so great, farmers either will be unable, or will refuse, to buy.

“This in itself is leading to greater appreciation by farmers of the advantage of using horses and mules, which are produced and maintained on farm products and which help to strengthen prices of farm commodities by keeping surplus acres off the market.”

Farmers Buy Feeders.
That there is reviving demand for farm horses is indicated by the association's figures showing receipts of 200,612 horses and mules at public markets in the first seven months of this year as compared with 162,524 for the same period in 1932.

Demand for weanlings, yearlings,

two and three-year-olds, the association reports, is stronger than it has been for many years. Animals of these ages are being sought particularly by corn belt farmers, Dinmore says, who wish to turn them into pasture and grow them on cheap feed.

“Shrewd farmers,” Dinmore says, “consider that colts which will be three or four years old next spring are a better buy today than cattle, sheep or hogs, as there appears to be more likelihood of a substantial appreciation in horse prices by that time.”

Band instruments and music valued at more than \$1,000 were stolen from headquarters of the municipal band at Quasah, Tex.

Buchanan County Asks for \$42,000 Civil Works Fund

(Courier Special Service)
Independence, Ia.—Buchanan county has applied for \$42,000 for civil works projects, which it is expected will give employment to 300 unemployed.

Of these projects five are for road improvement, one is for storm sewer construction in the city of Independence and \$7,500 is for labor to be employed on the construction of the Littleton dam.

The Littleton dam is a project of the state fish and game commission, with material furnished by that body, and the labor is by the county.

Waterloo Daily Courier
(November 21, 1933)

Waterloo Daily Courier
(February 22, 1934)

152 Men Will Have Work on Buchanan Projects of PWA

(Courier Special Service)
Independence, Ia.—The Public Works administration program in Buchanan county will consist of projects which will employ 152 men for 1,764 weeks, according to C. L. Hayward, chairman of the county national re-employment committee. These projects have either been approved or under contract and are all financed by the state or county.

Waterloo Daily Courier
(March 30, 1934)

\$25,000 PROJECT FINANCING TO BE THRU A PWA LOAN

Highway Commission Says City, W., C. F. & N. Must Co-Operate.

(Courier Special Service)
Waverly, Ia.—Approval of a repaving program for Bronner avenue, involving an expenditure of \$25,000, was received by Waverly officials Saturday from H. A. Maine, member of the Iowa highway commission.

City, Railway, Must Assist.
The approval is conditional on Waterloo, Cedar Falls & Northern railway and the municipality agreeing to make certain auxiliary improvements, according to Mayor H. A. Morey and G. O. VanderVeer, who visited Maine at Waterloo Saturday.

The commissioner approves paving 10 feet in width on either side the streetcar tracks. Financing will be thru a PWA loan, which already has been arranged.

W., C. F. & N. Engineer Coming.
The conditions are that the streetcar company improve the space between the tracks and that the city assume responsibility for the space between the edge of the proposed pavement and the street curbing. These improvements would involve repaving and smoothing.

Morey and VanderVeer also conferred with T. E. Rust, chief engineer of the railway company. He promised C. W. Eby of the engineering staff would be sent here Monday to confer with city officials with regard to the state highway commission's conditions.

Waterloo Daily Courier
(January 28, 1934)

261 MEN WORK ON CWA IN BUCHANAN

Full Quota Under Original Allotment Now Working; New Projects Outlined.

(Courier Special Service)
Independence, Ia.—Buchanan county's full quota of 261 men under the CWA started at work Wednesday on 17 different approved projects, the total cost of which approximates \$35,000. All projects that have been submitted by the county have been approved.

A project is to be submitted for the city of Independence for extensions of water mains, and other projects are planned by the towns outside of Independence. Of the projects already approved and upon which work is now being done, 10 consist of road surfacing on various roads throughout the county.

Others include the Littleton dam; work on water mains and hydrants and ditch work in the town of Wintthrop; straightening the river channel and sanitary work at Lamoni; graveling streets at Aurora; road grading and gutters and curbing at Brandon; graveling 40 blocks of streets in Independence; redecoration interior of school house at Aurora.

Waterloo Daily Courier
(December 6, 1933)

Buchanan County's Towns Will Reveal Way for Aviators

(Courier Special Service)
Independence, Ia.—The Buchanan county civil works administrators have been notified that an air marking project has been approved for the county which will require that eight towns in the county be air marked with the names on a high building in letters six feet high. The towns so designated are Fairbank, Hazleton, Lamont, Jesup, Independence, Wintthrop, Quasqueton and Brandon. The letters are to be painted in orange colored enamel and the work is to be done by CWA workers at \$1.20 per day. The paint will be furnished by the state administration.

Waterloo Daily Courier
(March 12, 1934)

The New Deal in Iowa and Buchanan County

Although the full “alphabet soup” of New Deal programs operated in Iowa, the focus here is on the three programs that funded the construction of dams in the Wapsipinicon River watershed. New Deal dams include the Littleton and Independence Low dams (CWA), Quasqueton and Coggon dams (FERA and WPA), and Frederika Dam (approved by WPA). With the exception of the Coggon and Frederika dams, all were located in Buchanan County.

Approximately 5,975 CWA projects were undertaken in Iowa, creating 53,250 jobs.¹³ The numbers ranged from 21 projects in Washington County to 282 projects in Polk County. Buchanan County had close to the statewide average, with 63 projects.¹⁴

Statewide, the largest single category of CWA projects was road and street work, which included grading, graveling, adding curbs and repairing pot-holes. Another roughly one-third of the projects were non-street repair or construction projects, which included building dams, park buildings, and other structures; repairing schools; and laying water mains and sewer lines. In Buchanan County, these projects included construction of two dams; work on a water main in Winthrop; septic tank and river channel work in Lamont; construction of a storm sewer in Independence; maintenance and redecoration work in the schools in Hazleton and Lamont; relocating a flagpole in Fairbank; and providing air markers to identify eight Buchanan County towns from the air.¹⁵

The remaining CWA projects included both white collar jobs and non-construction blue collar jobs. They included janitorial services, home nurse visits, stenography, clerical work and library

book rebinding and repair.¹⁶ Many were carried out by the Civil Works Service (CWS), created as a white collar counterpart to the CWA. While not designed specifically to assist women in need of work relief, the CWS came to employ a large number of women.¹⁷ In Buchanan County, all known CWS projects were carried out by women. These projects included staffing schools with cleaning and clerical staff, nurses and teachers; clerical work in city and county government offices; and sewing or mending clothes for families on relief.¹⁸

By October 1933, 163 people in Buchanan County were receiving unemployment relief.¹⁹ With the announcement of the CWA the following month, one Independence newspaper urged local officials “to get busy working out local projects. It is a big proposition and getting in on it by the county, city and communities would be beneficial to all concerned.”²⁰ By mid-December, Buchanan County was “one of twenty-nine counties in the state that ha[d] its quota of men at work, being one of the earliest to get that record.”²¹ In January 1934, the number of Buchanan County residents on the unemployed list had risen to 882, with 451 CWA placements.²²

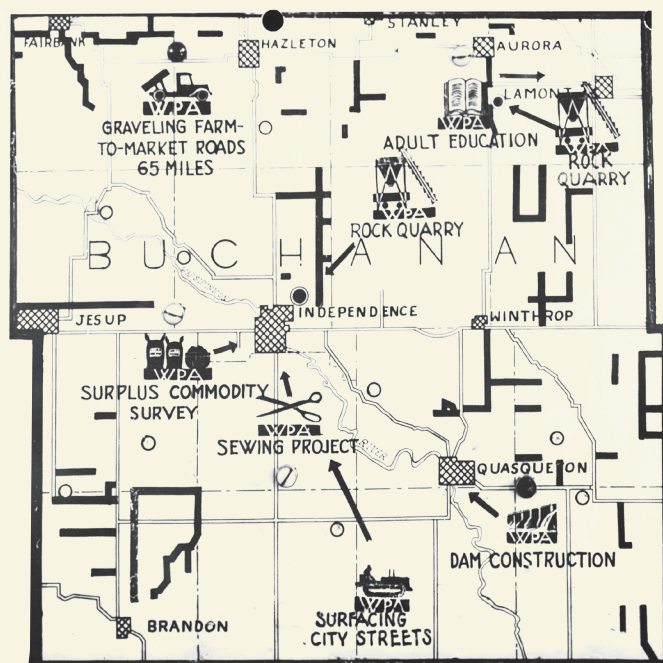
In all, CWA expenditures in Buchanan County between November 1933 and August 1934 totaled \$98,685.64—approximately \$1.7 million in 2013 dollars. Nearly two-thirds of this amount went towards wages and salaries, with the rest divided between equipment and materials. Nearly 70 percent of the total amount was supplied by the federal government. The remaining amount consisted of local funds provided by the state and county.²³

Information on FERA projects in Iowa is not as readily available as it is for CWA and WPA

projects. Since at least two dams were built in the Wapsipinicon watershed using FERA funds, it is clear that substantial FERA work relief projects continued in Iowa after the end of the CWA. However, it may be a sign of the shortcomings of that program that neither of the two FERA dams discussed below was completed on time, and both eventually had to be completed using WPA grants.

Although the WPA lasted for much longer than the CWA, it is noteworthy that fewer WPA projects were undertaken in Iowa during the seven years that program operated (5,222) than the number of projects undertaken during the CWA’s brief five-month history (5,975). Of the WPA projects in Iowa, 65 percent (3,399) were construction projects, and nearly a third (1,607) were road, street and bridge projects.²⁴

WPA projects in Buchanan County, as elsewhere, focused predominantly on improving streets and roads, but also included indoor work such as nursing, sewing and serving school lunches. With the exception of the completion of the Quasqueton Dam in 1935, no WPA projects in Buchanan County are known to have involved the construction of major buildings or structures.²⁵



1936 map of WPA projects in Buchanan County, Iowa (from Special Collections Department, Iowa State University Library).

The Wapsipinicon River Watershed

The Wapsipinicon River originates in Minnesota, just across the state line from Mitchell County, Iowa, and flows southeast to join the Mississippi River at the border between Scott and Clinton counties, Iowa. Currently eight dams span the Wapsipinicon River, all located along a 120-mile stretch between Frederika (Bremer County) and Anamosa (Jones County). No dams are present in the 95 miles of the river downstream from Anamosa.²⁶ The Wapsipinicon River watershed also includes numerous tributaries. The five largest include two tributaries named the Little Wapsipinicon River (one joining the main river near New Hampton, the other near Littleton), as well as Crane Creek, Otter Creek and Buffalo Creek.

The Wapsipinicon River, and the Littleton area in particular, have long been considered attractive fishing destinations. The construction of dams along the river helped to cement this reputation, particularly in combination with the State Fish and Game Commission's program of restocking the river above the dams with game fish from government fish hatcheries. This program began in the late 19th century. The draining of lakes and marshes for agriculture, excessive silting and erosion, and industrial pollution was drastically reducing the numbers of fish in Iowa's rivers and streams. Concerned about this loss, the state began to maintain fish hatcheries in order to periodically restock Iowa's waterways. In conjunction with restocking, the state also sponsored the construction of low-head dams to impound sufficient water to carry the fish through drought periods. Beautification of the rivers and the elimination of the health risks caused by pools of standing water during low water periods were also considered as reasons to support the construction of these dams.²⁷

Although some of the low-head dams along the Wapsipinicon River were built as mill dams in the late 19th or early 20th centuries, many were built during the 1930s to complement the restocking program. During the 1930s, approximately 50 low-head dams were constructed throughout the state of Iowa.²⁸

New Deal Dams in the Wapsipinicon River Watershed

In 1979 and 2010 the Iowa Department of Natural Resources (DNR) conducted two surveys of Iowa's dams. These surveys recorded every dam on every major river and stream in the state. Using the list of dams maintained by the DNR as a starting point, research has determined that four dams in

the Wapsipinicon watershed were constructed under one or more New Deal programs.

Littleton Dam, Buchanan County (1933–1934, CWA), extant

Independence Low Dam, Buchanan County (1934, CWA), extant

Quasqueton Dam, Buchanan County (1934–1935, FERA and WPA), extant but concealed

Coggon Dam, Linn County (1934–1936, FERA and WPA), non-extant

In addition to these four dams, a fifth, located at Frederika in Bremer County, was approved for WPA funding in 1935 but was never built as a WPA project. Five years later the dam was eventually constructed using only state funds and a local bond issue. Because of this history, the Frederika Dam is also included here as an “honorary” New Deal dam.

Three other dams are either known or reported to have been built in the Wapsipinicon River watershed during the New Deal era. Two built in Chickasaw County—one in 1934 and the other in about 1940—had no documented connection to the New Deal and are not shown on the map on Page 2.²⁹ The reported construction date of 1934 given for the third dam—Red Gate Park Rock Dam in Fayette County—could not be confirmed.³⁰

Records of engineering plans for the New Deal dams are sparse. Based on the limited information available from published sources and the dams themselves, the New Deal dams in the Wapsipinicon watershed appear to reflect standard engineering practices of the 1930s.³¹ The dams in the Wapsipinicon watershed were typically constructed of reinforced concrete or a combination of rock and concrete. The dams for which a specific designing engineer has been identified were designed locally, by either a county or state engineer, although the designs had to be approved by federal engineers to receive federal funds.

The Littleton Dam and the Independence Low Dam were probably designed by Buchanan County engineer Ralph W. Gearhart.³² Gearhart was in charge of engineering of the Littleton Dam, and was identified as the designer of the Independence Low Dam. He inspected the site of the Quasqueton Dam on at least one occasion, but the chief engineer for that dam appears to have been a state rather than a county engineer, one Mr. Baumer, who has not yet been identified in any other source. It is not presently known who designed the Coggon Dam or the Frederika Dam.

Littleton Dam

The first of the four known New Deal dams constructed in the Wapsipinicon watershed, the Littleton Dam, started as a locally funded project. Its construction was supported by the State Fish and Game Commission because the dam fit into the state's 25-year conservation plan. As originally proposed in August 1933, the state would supply the materials for the dam and a local committee would raise the funds for the labor. Construction of the dam started around November 1, 1933, using locally funded labor. Within days, however, the Civil Works Administration (CWA) was established, and by the third week in November the Iowa office of the CWA was receiving applications for projects. The local sponsors of the Littleton Dam applied for CWA funding, which was approved on November 24, subject to a small local match for "engineering advice and incidentals." The dam was constructed of reinforced concrete, and was seven feet high, 135 feet long, and 20 feet wide at the base. By mid-January 1934, an average daily work force of 50 men was at work, with as many as 72 workers one day. The concrete for the dam was poured in six sections. After delays due to high water in January, the dam was completed around the first week of March 1934.³³

The Littleton Dam was originally built without a fishway. The Wapsie Fish and Game Association agitated for a fishway for two years starting around 1936, and one was finally built in 1938 under the direction of the Iowa Fish and Game Commission. The concrete fishway was three feet, four inches wide, and had nine wood steps. A 24-foot railing was set in the concrete to prevent accidents.³⁴



View of 1938 fishway at Littleton Dam, 1939 (from LCHS-FFPC).



View of Littleton Dam, 1934 (from LCHS).



View of Littleton Dam from downstream, 2012 (OSA).

Independence Low Dam

Just before the phase-out of the CWA began in January 1934, the City of Independence applied successfully for CWA funds to build a trio of small dams across the Wapsipinicon at Independence downstream from the city's mill dam. On further investigation by the county engineer, the number of dams was reduced to two, and later to one. This dam, now known as the Independence Low Dam, spans the river at the north-west corner of Oak Grove Cemetery. The original plans called for multiple three-foot dams constructed of rock and other materials, but eventually a single four-foot dam was constructed of cement and stone taken from the river. The dam was apparently constructed in four sections. The work was started in late February 1934, and was completed a month later.³⁵

The dam served a variety of purposes, but the main one was to prevent fish from perishing in large numbers during times when the water flow over the mill dam was shut off by the power company that owned it. During these periodic water flow shutoffs, fish that had migrated upstream during high water were trapped in small pools below the power company's dam where most died. Other benefits of raising the water level between the two dams included beautifying the river and promoting more sanitary and healthful conditions during periods of low water.³⁶ A second dam constructed of rock now spans the river approximately 100 feet downstream from the original dam. Historic aerial photographs indicate that this dam was in place as early as the late 1930s. Nothing was discovered about the construction of this second dam, including whether it has any New Deal connection.

Quasqueton Dam

Plans for the Quasqueton Dam were developed in May and June 1934, shortly after the CWA ended. Federal funding was initially provided by FERA. However, the construction took much longer than originally planned, so the completion of the dam was funded in the fall of 1935 by the WPA. As with other New Deal dams in Iowa, the material was supplied by the State Fish and Game Commission, and the labor by the federal government (FERA or WPA).³⁷

Construction started in June 1934. The dam was 6½ feet high and 250 feet long. It was identified in newspapers more than once as a rock dam, but one article described cement (probably actually concrete) being poured into forms for the dam, so it may have been constructed of both rock and concrete. It is not clear which engineer was responsible for the dam's design. Newspapers mentioned that a state engineer, Mr. Baumer, conferred with local relief officials on the project and visited the site at least once. But the Buchanan County engineer, R. W. Gearhart, also visited the construction site, so it is not clear what roles the two engineers had in the design.³⁸

Although it was originally expected that the dam would take about five months to complete, construction actually took much longer. Work was delayed in November 1934 when the uncompleted dam was damaged by high water. Work resumed in spring 1935, but for unknown reasons the dam was not completed using FERA labor. It may be that the federal government began winding down FERA funding after the WPA was established in May 1935. Whatever the reason for



View of Quasqueton Dam from downstream, 2009 (from USFWS).

the delay, WPA funding to complete the dam was obtained in October 1935, and the dam was completed on November 11, seventeen months after construction began.³⁹

The Quasqueton Dam remains in place, but it was covered in 2014 by broken concrete and rock arranged in a series of downstream arcs to create a rock rapids. This was done to aid fish passage and to prevent dangerous undertows.⁴⁰

Coggon Dam (site of present Buffalo Creek Park Dam)

The New Deal dam in Coggon, located in northeastern Linn County, was replaced in 1967 by the current dam, known as the Buffalo Creek Park Dam.⁴¹ The New Deal dam was built in order to restore Manhattan Lake in Coggon. Construction began in September 1934 with labor supplied by FERA. Although the date of completion was not discovered, it was originally estimated that the dam would take four months to construct, suggesting an expected completion date in early 1935. However, just as with the FERA dam in Quasqueton, the construction of the Coggon Dam took considerably longer than originally estimated. One problem was a disagreement between the state and Linn County regarding which of the two would pay the \$700 cost for materials. It was not until December 1934 that the state agreed to absorb the expense. But other delays seem to have occurred, since again, the completion of the Coggon Dam became a WPA project in the fall of 1935.⁴² The dam was probably completed in 1936, since a photograph of it taken in February 1936 appears to show it uncompleted (see photograph below).

This dam is identified on its WPA project card as a “rock fill dam.” The 1936 photograph of the dam, however, appears to show its downstream slope constructed of concrete, making it unclear exactly where rock was used in the dam and where concrete was used. The amount approved by the WPA for completing the Coggon Dam was almost \$27,000, more than was typically requested for entire New Deal dam projects in the Wapsipinicon watershed, and much more than the \$3,020 approved for the completion of the Quasqueton Dam. The reason for the large amount requested is not presently known.⁴³

Frederika Dam

Although the Frederika Dam is not technically a New Deal dam, it was not for lack of trying. The town of Frederika sought funding from different New Deal programs, and was even granted WPA funding in 1935. But for various reasons, the dam was never completed as a federal project. It was eventually built in 1940, funded entirely by the state of Iowa and a local bond issue. For this reason, the Frederika Dam is included here as an “honorary” New Deal dam.

An earlier dam in Frederika was damaged in the spring of 1935. For some time afterwards, it appeared certain that the dam would be rebuilt as a federal project. In June 1935, it was proposed to rebuild the dam using Public Works Administration (PWA) funds. Records indicate that John E. Flanagan, relief engineer, was in the process of drawing up plans in September. Local sponsors planned to seek a PWA grant for 45 percent of the project costs.⁴⁴ Either the references to the PWA were mistaken, or the dam’s proponents decided



Photograph of Coggon Dam, 1936 (from Special Collections Department, Iowa State University Library).

to apply to a different federal funding agency. Whatever the reason, the dam was approved for \$6,880 in WPA (rather than PWA) funding on October 18, 1935.⁴⁵ But the dam was still not built. In July 1936, Frederika residents decided to repair the dam themselves “[w]ithout waiting for a federal grant to build a new dam.” Although it is not clear why this happened, the WPA grant was eventually withdrawn and the project rescinded in February 1937.⁴⁶

The movement to build a new dam began to gain renewed momentum in May 1938, when the Wapsie Fish and Game Club expressed an interest in acquiring WPA funds to rebuild the dam. State engineers were later sent to inspect the site, and in September 1938, Governor Nelson G. Kraschel promised that the state would “finance the larger portion” of the dam and adjacent park improvement.⁴⁷ The WPA was reported to have made a grant of \$3,000 towards this project shortly afterwards, and again the construction of the dam seemed assured.⁴⁸

But again problems arose. The most significant problem was that the U.S. Army Corps of Engineers declined to accept the proposed design of the dam approved by the WPA engineers. The Corps wanted a much larger dam, capable of handling 24,000 cubic feet of water per second, rather than the 7,500

cubic feet per second capacity of the original design.⁴⁹ The dam’s local promoters countered by requesting a smaller dam costing \$20,000, pleading that it would not otherwise be possible to make up the difference locally between the amount granted by the state and federal governments and the total cost.⁵⁰ But the Corps evidently rejected the counterproposal, and plans for the dam were again stalled.

Finally, in March 1940, the town of Frederika decided to forego federal funding and requested bids on a smaller dam. The low bid was \$15,000, but with further plan revisions, this was ultimately reduced to \$10,000. Of this amount, \$8,500 would come from the state and \$1,500 from a local bond issue. The bond issue was approved unanimously on May 29. In June 1940, five years after a new dam was originally proposed, construction was finally started. The dam was built by Welden Bros. of Iowa Falls, and was completed by the end of August. It was 135 feet long, and was located just downstream from the old dam. It was 2½ feet wide at the top and 13 feet wide at the base. Wing walls at each end of the dam extended both upstream and downstream from the dam, and rose four feet above the crest of the dam. The construction material, most likely some combination of concrete and rock, was never identified in newspaper articles.⁵¹



Photograph of Frederika Dam, 2010 (from USFWS).

The Legacy of the New Deal in Iowa

It is hard to overestimate the impact of the New Deal programs on the Iowa landscape. The core idea of the New Deal work relief programs was to provide work to jobless Americans by having them create useful public works. In addition to feeding and clothing millions of families during a time of severe economic crisis, the work relief projects also altered the physical and cultural landscape of the state. Although some New Deal work relief projects did not involve construction, many FERA and WPA projects—and nearly all projects of the CCC, PWA and CWA—involved some change to the built or landscaped environment. These projects included the construction of buildings, dams, bridges, waterworks, swimming pools, and other public works; resurfacing of roads; landscaping public parks and green spaces; and in some cases, erosion control on private farmland. Anyone who grew up or raised a family in Iowa in the mid to late 20th century would have encountered many examples of New Deal buildings, bridges, dams, park structures, and other public works.⁵²

The legacy of the New Deal dams in the Wapsipinicon River watershed continues into the 21st century. More than 80 years after they were built, these dams remain valued as recreation areas for neighbors and visitors alike. They have become beloved landmarks which may be closely tied to the identity of the associated towns. Although safety issues and changing ideas of conservation practices have required the removal of some older dams, others remain to remind us of the worst economic crisis of the 20th century and the national legacy of public works that were created in response.



Photographs of Littleton Dam used for recreation in the 1930s and 1940s (from LCHS-FFPC).

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OSA—provided by the University of Iowa Office of the State Archaeologist.

LCHS—digital image from Dennis McGlaughlin courtesy of the Littleton and Chatham Historical Society.

LCHS-FFPC—digital images from the Fisher family photography collection courtesy of the Littleton and Chatham Historical Society.

USFWS—provided by the United States Fish and Wildlife Service.

Endnotes

- 1 Iowa Public Broadcasting Network.
- 2 Bauer.
- 3 Bauer; McElvaine, pp. 35–37; Narber, pp. 15–25.
- 4 Dileva 1953; Dileva 1954.
- 5 Vollan; Iowa Public Broadcasting Network.
- 6 Narber, pp. 24–28.
- 7 Schwartz, p. 26; Narber, p. 164; McElvaine, p. 265.
- 8 Schwartz, pp. 26–27, 33–35.
- 9 Schwartz, pp. 239–252.
- 10 *The Nation*; McElvaine, p. 153; *Waterloo Daily Courier* 1933b.
- 11 Schwartz, pp. 213–214, 226–231, 239–240.
- 12 McElvaine, pp. 265–288; Schwartz, pp. 252–259.
- 13 *Waterloo Daily Courier* 1933c.
- 14 The number of CWA projects in Iowa and Buchanan County is derived from the table in Appendix B of Narber, pp. 259–264. A slightly different number (5,977) is given in Narber, p. 171. The CWA total appears to include both CWA and Civil Works Service projects (see below).
- 15 *Bulletin-Journal* 1933b, 1933e, 1934a, 1934b, 1934e; *Waterloo Daily Courier* 1934a.
- 16 Narber, p. 173.
- 17 Schwartz, pp. 164–166.
- 18 *Bulletin-Journal* 1933d, 1933f, 1934f.
- 19 Iowa Emergency Relief Administration, p. 10-A.
- 20 *Bulletin-Journal* 1933a.
- 21 *Bulletin-Journal* 1933c.
- 22 *Bulletin-Journal* 1934c.
- 23 *Bulletin-Journal* 1935b.
- 24 Narber, p. 171.
- 25 Work Projects Administration, Buchanan County, Iowa.
- 26 Iowa Department of Natural Resources ca. 2014.
- 27 Church and Chappell, p. 38; State of Iowa, pp. 60, 97–98; *Bulletin-Journal* 1934d.
- 28 Iowa Department of Natural Resources 2010, p. 9.
- 29 *Morning Sun News-Herald*; *Mason City Globe-Gazette*.
- 30 Iowa Conservation Commission, table titled “Iowa Inland River Dams.”
- 31 Such practices are described in handbooks of the period, such as Edward Wegmann’s classic treatise *The Design and Construction of Dams*, published in several editions between 1899 and 1922.
- 32 *Waterloo Evening Courier* 1929; *Waterloo Daily Courier* 1933a, 1934b.
- 33 Carlson.
- 34 *Sumner Gazette* 1938a.
- 35 *Bulletin-Journal* 1934d, 1934g, 1934h, 1934i, 1934j, 1934k.
- 36 *Bulletin-Journal* 1934h, 1934i.
- 37 *Bulletin-Journal* 1934l, 1934m. An often cited 1967 history of Quasqueton identifies this dam as a Public Works Administration (PWA) project, but no evidence of a PWA connection has been found; see Miller Printing, pp. 22, 74.
- 38 *Bulletin-Journal* 1934l, 1934m, 1934n, 1934o, 1934p, 1934q, 1934r, 1935a.
- 39 *Bulletin-Journal* 1934n, 1934r, 1935a, 1935c, 1935d; Work Projects Administration, Buchanan County, Iowa, card for WPA project No. 82618.
- 40 Love; Iowa Department of Natural Resources 2010, Chapter 1.
- 41 Iowa Conservation Commission, table titled “Iowa Inland River Dams.”
- 42 *Marion Sentinel* 1934a, 1934b; Work Projects Administration, Linn County, Iowa, card for WPA project No. 57-1115.
- 43 Work Projects Administration, Linn County, Iowa, card for WPA project No. 57-1115.
- 44 *Sumner Gazette* 1935a, 1935b.
- 45 Work Projects Administration, Bremer County, Iowa, card for WPA project No. 82645; *Sumner Gazette* 1935c. Another article said that funding had been approved in December 1935; see *Sumner Gazette* 1936a.
- 46 *Sumner Gazette* 1936b; Work Projects Administration, Bremer County, Iowa, card for WPA project No. 82645.
- 47 *Postville Herald* 1938a; *Sumner Gazette* 1938b, 1938c.
- 48 *Postville Herald* 1938b. However, there is no evidence from WPA project cards that this project was approved any time between 1938 and 1942.
- 49 *Elgin Echo*; *Postville Herald* 1939.
- 50 *Sumner Gazette* 1939.
- 51 *Fayette County Leader* 1940; *Sumner Gazette* 1940a, 1940b, 1940c.
- 52 Historian Gregg Narber spends seven pages in his book on the New Deal in Iowa listing those New Deal structures that have played a part in his life; see Narber, pp. 1–7.

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1933e New Projects Added. *The Bulletin-Journal*, December 21, 1933, p. [8].
1933f CWA Has 351 Men and CWS Has 22 Women. *The Bulletin-Journal*, December 28, 1933, p. 1.
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1934f Relief Work in Education. *The Bulletin-Journal*, January 25, 1934, p. 1.
1934g Two Dams Necessary. *The Bulletin-Journal*, February 15, 1934, p. 1.
1934h Work Started On 2 New Dams. *The Bulletin-Journal*, March 1, 1934, p. 1.
1934i Plan One Small Dam Below Main Street Bridge. *The Bulletin-Journal*, March 15, 1934, p. 1.
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1934m Quasqueton column. *The Bulletin-Journal*, May 17, 1934, p. [9].
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